

Date: Tue, 14 Jun 94 04:30:20 PDT  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V94 #161  
To: Ham-Homebrew

Ham-Homebrew Digest                      Tue, 14 Jun 94                      Volume 94 : Issue 161

Today's Topics:

                    Help with Antenna Rotator (2 msgs)  
                                HP8052-3081 PIN diodes  
HY-GAIN INSTRUCTION/OPERATORS MANUALS up for grabs  
                                ic02e  
                    Instrumentation coaxial relays?  
                                Kits (3 msgs)  
Lowfer (1750) plans requested.....  
                    midnight engineering (2 msgs)  
Painting a 1.2GHz Antenna (3 msgs)  
                    Thanks: 6M AM HT freqs

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

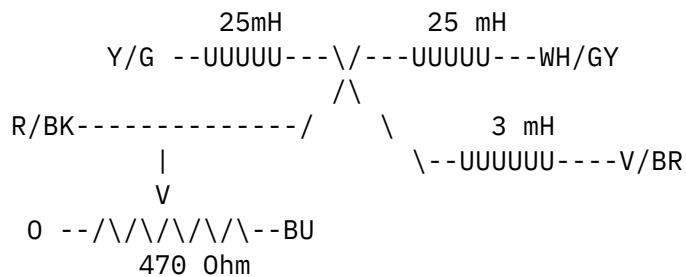
Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Mon, 13 Jun 1994 17:58:21 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!concert!  
hearst.acc.Virginia.EDU!cscsun!dtiller@network.ucsd.edu  
Subject: Help with Antenna Rotator  
To: ham-homebrew@ucsd.edu

I recently purchased a tower and VHF antenna system that happened to  
come with a house :-) and I'd appreciate it if someone could give me a  
hand figuring out the rotator. The previous owner left a control box,  
but I don't think it's the correct one. By some clever sleuthing with  
my ohm/inductance meter, I've found the following configuration 'up the  
tower':



Y/G = Yellow/Green; WH/GY = White/Gray; R/BK = Red/Black; V/BR = Violet/Brown;  
 O = Orange; BU = Blue

By the looks of it, there are 6 separate wires, with R/BK being ground, V/BR being the brake, O/BL/R/BK the sense circuit, and Y/G and WH/GY being the actual rotator coils. The previous owner says he thinks it's an alliance HAM IV rotator. Does the above schematic agree? What voltages/current ratings does this rotator take? The box that was left has 8 outputs - is it compatible, or is it to another type? (As I recall it says CDR on it - also 'Cornell Dublier'). If it's not compatible, I'd like to make (a computer controlled) one. I'm not up to climbing the silly thing (125 feet) since I fell 'with' an improperly guyed tower some years ago and broke a bone in my foot. The old courage just ain't the same :-)

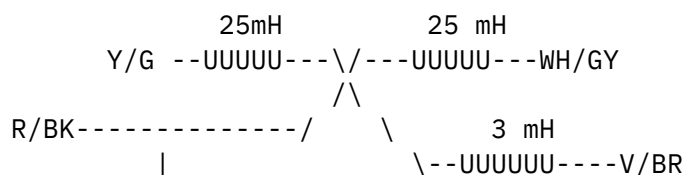
Any help will be greatly appreciated, and thanks in advance,

--  
 David Tiller | Network Administrator | Voice: (804) 752-3710 |  
 dtiller@rmc.edu | n2kau/4 | Randolph-Macon College | Fax: (804) 752-7231 |  
 Brady Law critique removed | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |  
 due to liberal PC pressure. | Ashland, Va 23005 | 77d 31' 32.19" W |

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 Date: Mon, 13 Jun 1994 20:36:48 GMT  
 From: news2.near.net!das-news.harvard.edu!cantaloupe.srv.cs.cmu.edu!dolphin!  
 ed@yale.arp  
 Subject: Help with Antenna Rotator  
 To: ham-homebrew@ucsd.edu

Hi Dave, I have 1 piece of info on you rotator...

It's an AC phase reversible motor. We played with one of these for days at Gateway Tech before figuring out how to make it run.



V  
O --/\//\//\//\--BU  
      470 Ohm

Y/G = Yellow/Green; WH/GY = White/Gray; R/BK = Red/Black; V/BR = Violet/Brown;  
O = Orange; BU = Blue

By the looks of it, there are 6 separate wires, with R/BK being ground,  
V/BR being the brake, O/BL/R/BK the sense circuit, and Y/G and WH/GY  
being the actual rotator coils.

To make the motor spin, we used 12vac connected as follows:

ac1 to R/BK (common)

ac2 to Y/G (coil 1)

ac2 through 50uf non pol cap to WH/GY (coil 2)

to reverse direction just switch which coil gets the cap.

I have seen several of these motors, and all have operated on the same principle  
of phase lead/lag to make it spin.

I would expect that nearly any rotator would work it provided that the voltage  
was same. I have seen a rotor box that had a 24v filament type transformer that  
powered it.

Hope this info is of use.

Ed Bathgate  
Expect to be N3S\*\* (soon I hope)

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Date: 14 Jun 1994 05:13:03 GMT  
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!gerald@cc.utexas.edu!ziggy.ph.utexas.edu!  
bsn@network.ucsd.edu  
Subject: HP8052-3081 PIN diodes  
To: ham-homebrew@ucsd.edu

Can anyone suggest a source for small lot quantities of the above  
referenced PIN diode?

Thanks,

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Date: 13 Jun 1994 19:42:52 GMT  
From: ihnp4.ucsd.edu!news.service.uci.edu!mothra.nts.uci.edu!  
lockhart@network.ucsd.edu  
Subject: HY-GAIN INSTRUCTION/OPERATORS MANUALS up for grabs  
To: ham-homebrew@ucsd.edu

I have been trying to give this away for some time now. Perhaps  
someone will take it off my hands this time.

I have the following INSTRUCTION/OPERATORS MANUAL up for grabs:

HY-GAIN THUNDERBIRD (TH3Mk30 THREE ELEMENT HAM ANTENNA.

This INSTRUCTION/OPERATORS MANUAL is in good condition.

The intent is to give this INSTRUCTION/OPERATOR MANUAL to an  
individual or entity who ACTUALLY has the equipment.

The first person to send me e-mail and follow up with a large manila  
SASE with postage for 3 ounces gets the prize.

If you are the lucky one, you will be asked to send a SASE (large  
manila or other envelope) with the appropriate amount of U.S. postage  
to me c/o the address in my .sig file.

Also, as a courtesy, a photocopy of the manual will be sent to anyone  
else who sends me a SASE.

Good luck to one and all.

73,

~jack\_

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/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\
|      Jack C. Lockhart      << SNAILMAIL      |
|      Radio Systems Engineer      E-MAIL > LOCKHART@uci.edu      |
|      OAC - Electronic Comm. Svcs.      !BANG! > ...!ucbvax!ucivax!lockhart      |
|      2209 Central Plant Building      HAM > WD6AEI      |
|      University of California, Irvine      AMPR > WD6AEI@n0ary.#nocal.ca.usa.na      |
|      Irvine, CA 92717-5475      VOICE > (714) 856-8477      |
|      U.S.A      FAX > (714) 725-2270      |
/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\
|      "And in the beginning there was nothing. And God said, 'let there be      |
|      light'. And there was still nothing, BUT you could see IT!" -Anonymous      |
/      o o o o o o o . . .      -----=====-----\
|      o      -----      |      |      |      |      |      |      |      |

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other than me in order to not do several and dummy shipment.

Roberto VALFREDINI

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Date: 14 Jun 1994 06:12:44 GMT  
From: pa.dec.com!nntpd.lkg.dec.com!iamu.chi.dec.com!little@decwrl.dec.com  
Subject: Instrumentation coaxial relays?  
To: ham-homebrew@ucsd.edu

I'm building transverters for 903 MHz and 1296 MHz and wondering whether I can use some coaxial relays I picked up at a hamfest for use in T/R switching at low power. They are instrumentation relays from the looks of them, i.e. square boxes with BNC connectors, reed relays inside, and apparently terminated when not powered into a 75 ohm resistive load (according to my trusty multimeter.) I'm assuming they won't handle more than a few watts, but for now that's OK with me. My concern is that they are probably 75 ohm impedance based upon the 75 ohm termination and that they probably came out of some piece of instrumentation where 75 ohms is the norm.

The only real information I have is from a label which indicates they were supplied by R.F. Components, Hoddesdon, Herts, England, model number is A4202.02.28D.82.04. Also from trying them out, they appear to have 12V coils, and be configured as 2 SPST relays sharing the normally open contact.

Will the 50/75 ohm mismatch cause much problem for something like the NEC monolithic power amps such as the SC1043? Also, what's the likely power handling capability of such a relay?

73,  
Todd  
N9MWB

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Date: Mon, 13 Jun 1994 13:10:29 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!swrinde!emory!rsiatl!ke4zv!gary@network.ucsd.edu  
Subject: Kits  
To: ham-homebrew@ucsd.edu

In article <TROCH.94Jun12135608@gandalf.Rutgers.EDU> troch@gandalf.Rutgers.EDU (Rod Troch) writes:

>I am a new ham, waiting for my license. While I wait patiently for those  
>12 weeks to pass I figured I would start building some things. One

>thing I would like to build is a CW practice oscillator.

>

>Do you have any simple instructions and parts list for such a job, or

>do you know of any place that sells such kits?

Congrats on the new ticket. The simplest CPO today is just a piezo-electric noisemaker, a battery, and a key. Parts available at Radio Shack. Works good, costs little. However, if you want to be able to vary the tone, you can use one of any number of single or dual transistor oscillators, or something squarewave and raspy like a 555 timer. A two transistor wien bridge feedback oscillator would be the cleanest. Circuits are in the ARRL Handbook. (You should have a copy of this book. If not, get it, but in the meantime your library should have a copy.)

If you want to be absurd, you can program an oscillator on a PC, using it's internal speaker, and key it via a key hooked to a status line on a serial or parallel port. This is actually a good introduction to realtime assembler programming on the PC. If you don't send too fast, you can even program this in Basic. :-)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Mon, 13 Jun 94 21:16:14 GMT

From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!zip.eecs.umich.edu!  
panix!198!mgalatz@network.ucsd.edu

Subject: Kits

To: ham-homebrew@ucsd.edu

Is there such a thing as a kit to build a tube receiver

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Date: 14 Jun 1994 02:55:06 GMT

From: pa.dec.com!nnntpdlkg.dec.com!iamu.chi.dec.com!little@decwrl.dec.com

Subject: Kits

To: ham-homebrew@ucsd.edu

Antique Electronic Supply in Tempe AZ I'm fairly certain has at least one tube receiver kit in their catalog.

73,  
Todd  
N9MWB

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Date: Mon, 13 Jun 1994 22:11:12 GMT  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!news.unt.edu!news.oc.com!  
merlin.etsu.edu!talon@network.ucsd.edu  
Subject: Lowfer (1750) plans requested.....  
To: ham-homebrew@ucsd.edu

Does anyone know where I can get plans for the Lowfer (1750) band. I am  
interested in both CW and Voice.

Thanks,  
David Fox  
KB5ULK

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Date: 13 Jun 94 09:43:36 CDT  
From: timbuk.cray.com!ned.cray.com!lindco2!jal@uunet.uu.net  
Subject: midnight engineering  
To: ham-homebrew@ucsd.edu

Midnight Engineering  
111 E. Drake Road, Suite 7041  
Fort Collins, CO 80525-9828

This was from the March/April 1992 mag, so don't know how current it is.

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Date: 13 Jun 1994 17:04:24 GMT  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!math.ohio-state.edu!magnus.acs.ohio-  
state.edu!csn!col.hp.com!fc.hp.com!jayk@network.ucsd.edu  
Subject: midnight engineering  
To: ham-homebrew@ucsd.edu

James A Lindberg (jal@cray.com) wrote:  
: Midnight Engineering  
: 111 E. Drake Road, Suite 7041  
: Fort Collins, CO 80525-9828

: This was from the March/April 1992 mag, so don't know how current it is.

In the Ft. Collins 1993 phone book Midnight Engineering Magazine is



73, Jay KOGU jayk@fc.hp.com  
Hewlett Packard Ft. Collins

When I was doing microwave field work, we often painted 11 Ghz and 18 GHz antennas for matching color of structures etc. Most pigments are Ok. Stay away from those that have a high percentage of metal oxides or suspended particles, e.g. metallic looking finishes. On the Empire State Building we painted some 11.7 Ghz 6 ft. Andrew dishes including the radome cover with no measureable loss of signal.

Phil  
de kj6nn

In article <2tgf2v\$hmm@news.tv.tek.com> johnr@soul.tv.tek.com (John Reynolds) writes:

>  
>Will a coat of paint degrade the performance of a 1.2Ghz antenna? I have a  
>loop yagi from Downeast Microwave that I'd like to spray with some  
>"camouflage" paint. Any info is appreciated.  
>  
>Thanks,  
>  
>John Reynolds NZ7J  
>  
>  
Should be no problem...as long as you do not use any metallic based paints!

Nick

--

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*****
*      Nick Ciarallo                                     *
*      SR Telecom Inc.          telephone: 514-335-2429   ex: 438      *
*      Microwave Group          facsimile: 514-334-7783     *
*      8150 Trans Canada Hwy     internet : nick@vlsi.polymtl.ca      *
*      St. Laurent, Quebec       hamradio : ve2hot@ve2fkb.pq.can.na    *
*      Canada H4S-1M5                                                    *
*****
*      Accept no substitutes, *REAL* ham radio lives on 220 MHz!      *
*****
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Date: Mon, 13 Jun 1994 16:56:48 CDT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!newsxfer.itd.umich.edu!  
jobone!ukma!news.cuny.edu!ndsuvml!ud167958@network.ucsd.edu  
Subject: Thanks: 6M AM HT freqs  
To: ham-homebrew@ucsd.edu

Thanks to all the folks who responded to my query about converting  
RS walkie-talkies to 6M. Our netnews program here got messed up  
and dumped about 12 days worth of news items, so if you sent  
me something and I didn't reply, it's nothing personal B-).

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End of Ham-Homebrew Digest V94 #161  
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